

REMARKS

By this Preliminary Amendment, original claims 2-8, and 14-17 have been canceled.

Claims 20-31 were canceled by a previous Amendment. By this Preliminary Amendment, claims 1, 9-11 and 18 have been amended, and new claims 32 and 33 have been added. This application now includes claims 1, 9-13, 18, 19, 32, and 33.

Applicants have canceled claims 2-8, and 14-17, and hereby reserve the right to pursue claims 2-8, and 14-17 in a continuation application.

In the previous Office Action, the claims of the present invention were rejected under 35 U.S.C. §102(e) as being anticipated by Cone, et al., U.S. Patent Application Publication No. 2002/0078118 A1 (hereinafter, Cone).

Cone is directed to a network interface ASIC that allows direct attachment for an appliance, such as a printer device (paragraph 0002). Cone discloses an ASIC that substantially removes or reduces the need for standard components (such as a CPU, RAM and flash memory, internal embedded software, and a fully network-standard-compliant network controller) that are typically distributed among several devices in a system (paragraph 0014).

ASIC 10 allows direct attachment between an appliance 14 and a network having a network device 16, which can include network controllers or adapters such as Ethernet controllers, media access control (MAC) controllers, PCI controllers, input/output (I/O) controllers such as small computer system interface (SCSI) controllers, network interface cards (NICs), switches, routers, or other such devices (paragraph 0016, Fig. 1). Examples of the appliance 14 can include printer devices such as a printer or a print server, graphic display

devices, disk drives, or other peripheral devices or parallel port-equipped devices (paragraph 0017).

Applicants believe that claims 1, 9-13, 18, 19, 32, and 33 patentably define Applicants' invention over Cone, for at least the reasons set forth below.

Regarding claim 32, new claim 32 is directed to a computer network, and recites, in part, a microprocessorless network adapter interconnecting said at least one host computer and said at least one peripheral device, wherein said adapter is configured to provide power to said at least one peripheral device.

Applicants respectfully submit that Cone simply does not disclose, teach, or suggest wherein the adapter is configured to provide power to the at least one peripheral device.

For example, Cone paragraph 0021 discloses that packet processor unit 22 may be programmable through an external storage device, such as an erasable programmable read-only memory (EPROM) 32, during power up (e.g., at boot time) of the ASIC 10, which includes configuration of the ASIC 10 by the initialization unit 26 during power up.

Cone paragraph 0021 also discloses that when power up occurs, the packet processor unit 22 reads stored data from the EPROM 32 and then uses the data to configure the rest of the ASIC 10.

However, a processor unit being programmable during power up, e.g., at boot time, and reading stored data when power up occurs, as disclosed by Cone, does not disclose, teach, or suggest the adapter being configured to provide power to the at least one peripheral device, as recited in claim 32.

Rather, Cone paragraph 0021 pertains to internal processes that take place during the boot up of ASIC 10, and are wholly unrelated to providing power to a peripheral device.

Cone paragraph 0033 also discloses that a power-up state 56 is the first state of the state machine 54 when power is asserted. However, the a power up state being the first state of a state machine does not in any way disclose, teach, or suggest the adapter being configured to provide power to the at least one peripheral device, as recited in claim 32.

Rather, Cone paragraph 0033 pertains to internal processes that take place during the boot up of ASIC 10, and are wholly unrelated to providing power to a peripheral device.

Cone claim 18 discloses programming the state machines using information stored externally to the integrated circuit and loaded on to the integrated circuit during power up, which pertains to internal processes that take place during the boot up of ASIC 10, and is wholly unrelated to providing power to a peripheral device.

Cone does not in any manner otherwise disclose, teach, or suggest the adapter being configured to provide power to at least one peripheral device, as recited in claim 32.

Accordingly, for at least the reasons set forth above, Applicants respectfully submit that Cone does not anticipate claim 32.

Support for the above-recited subject matter of claim 32 may be found in Applicants' specification at page 9, lines 16-20.

New claim 33 is directed to a network adapter, and recites, in part, wherein said adapter is configured to provide power to at least one peripheral device.

Cone does not anticipate claim 33 for at least the reasons set forth above with respect to claim 32.

Support for the above-recited subject matter of claim 33 may be found in Applicants' specification at page 9, lines 16-20.

Regarding claim 1, amended claim 1 is directed to a computer network, and recites, in part, a USB hub interconnecting said at least one peripheral device and said network adapter.

Cone does not disclose, teach, or suggest a USB hub interconnecting the at least one peripheral device and the network adapter. Rather, Cone discloses that the ASIC 10 is connected directly to appliance 14 via a connector 20, which is not a USB hub, but instead is simply disclosed by Cone as being a connector (Fig. 1, paragraph 0018).

Although Cone paragraph 0015 discloses that embodiments of the Cone invention may be implemented with non-PCI systems, such as USB, Cone simply does not disclose, teach, or suggest a USB hub interconnecting the appliance 14 and the ASIC 10, and hence, does not disclose, teach, or suggest a USB hub interconnecting the at least one peripheral device and the network adapter, as recited in claim 1.

Accordingly, for at least the reasons set forth above, Applicants respectfully submit that Cone does not anticipate claim 1.

Claim 9 is directed to a computer network, and recites, in part, wherein said adapter is configured to manage power on said at least one peripheral device.

Cone does not disclose, teach, or suggest the subject matter recited in claim 9.

As set forth above with respect to claim 32, Cone paragraphs 0021 and 0033 and Cone claim 18 pertain to internal processes that take place during the boot up of ASIC 10.

However, the disclosed Cone processes during boot up are not disclosed as affecting or relating to power management on a peripheral device, but rather, are wholly unrelated to managing power on at least one peripheral device, as recited in claim 9.

Cone does not otherwise disclose, teach, or suggest the adapter being configured to manage power on at least one peripheral device, as recited in claim 9.

Accordingly, for at least the reasons set forth above, Applicants respectfully submit that Cone does not anticipate claim 9.

Claim 10 is directed to a computer network. Claim 10 recites, in part, wherein said adapter is configured to send said at least one peripheral device at least one command to go into a low-power sleep mode until said adapter detects inbound data bound for said at least one peripheral device.

Cone does not disclose, teach, or suggest the subject matter recited in claim 10.

As set forth above with respect to claim 32, Cone paragraphs 0021 and 0033 and Cone claim 18 pertain to internal processes that take place during the boot up of ASIC 10.

However, the disclosed Cone processes during boot up are not disclosed as affecting or relating to sending a command to a peripheral device, much less at least one command for a peripheral device to go into a sleep mode until the adapter detects inbound data bound for the at least one peripheral device, as recited in claim 10.

Rather, Cone is completely silent as to the adapter being configured to send at least one peripheral device at least one command to go into a low-power sleep mode until the adapter detects inbound data bound for the at least one peripheral device, as recited in claim 10.

Accordingly, for at least the reasons set forth above, Applicants respectfully submit that Cone does not anticipate claim 10.

Claim 11 is directed to a computer network. Claim 11 recites, in part, wherein said adapter is configured to at least one of send a wake-up command to said at least one peripheral device and verify an active status of said at least one peripheral device before accepting the inbound data.

Cone does not disclose, teach, or suggest the subject matter recited in claim 11.

As set forth above with respect to claim 32, Cone paragraphs 0021 and 0033 and Cone claim 18 pertain to internal processes that take place during the boot up of ASIC 10.

However, the disclosed Cone processes during boot up are not disclosed as affecting or relating to sending a wake-up command to a peripheral device or verifying an active status of a peripheral device much less before accepting the inbound data, as recited in claim 11.

Rather, Cone is completely silent as to the adapter being configured to at least one of send a wake-up command to the at least one peripheral device and verify an active status of the at least one peripheral device before accepting the inbound data, as recited in claim 11.

Accordingly, for at least the reasons set forth above, Applicants respectfully submit that Cone does not anticipate claim 11.

Claim 12 is directed to a computer network. Claim 12 recites, in part, wherein said adapter is configured to perform automatic USB enumeration.

Although Cone discloses that the Cone invention may be implemented with USB systems (paragraph 0015), Cone does not disclose how USB enumeration is performed, much less that ASIC 10 performs automatic USB enumeration.

Cone paragraphs 0023-0028 disclose ASIC 10 operations pertaining to network communications using packet processor 22 and packet assembler unit 24, but do not disclose, teach, or suggest automatic USB enumeration. Rather, Cone paragraphs 0023-0028 are unrelated to USB enumeration, but instead, pertain to network communications.

Cone paragraph 0046 discloses that data such as printer type or printer status may be obtained using ASIC 10 as part of a normal data transaction, but does not disclose, teach, or suggest automatic USB enumeration, and is unrelated to USB enumeration.

In addition, Cone does not otherwise disclose, teach, or suggest automatic USB enumeration.

Accordingly, for at least the reasons set forth above, Applicants respectfully submit that Cone does not anticipate claim 12.

Claim 13 is directed to the network of claim 12, wherein said enumeration is performed without software.

Cone does not disclose, teach, or suggest automatic USB enumeration, and hence, does not disclose, teach, or suggest wherein the enumeration is performed without software.

In addition, Cone discloses in paragraph 0014 that ASIC 10 operations employ internal embedded software (paragraph 0014), as opposed to enumeration being performed without software, as recited in claim 13.

Accordingly, for at least the reasons set forth above, Applicants respectfully submit that Cone does not anticipate claim 13.

Claim 13 is also believed allowable due to its dependence on otherwise allowable base claim 12.

Claim 18 is directed to a network adapter. Claim 18 recites, in part, wherein said application specific integrated circuit is configured to perform automatic USB enumeration.

Cone does not disclose, teach, or suggest wherein the application specific integrated circuit is configured to perform automatic USB enumeration for at least the reasons set forth above with respect to claim 12.

Accordingly, for at least the reasons set forth above, Applicants respectfully submit that Cone does not anticipate claim 18.

Claim 19 is directed to the adapter of claim 18, wherein said enumeration is performed without software.

Cone does not disclose, teach, or suggest wherein the enumeration is performed without software for at least the reasons set forth above with respect to claim 13.

Accordingly, for at least the reasons set forth above, Applicants respectfully submit that Cone does not anticipate claim 19.

Claim 19 is also believed allowable due to its dependence on otherwise allowable base claim 18.

For at least the foregoing reasons, Applicants submit that the present application is in condition for allowance in its present form, and it is respectfully requested that the Examiner so find and issue a Notice of Allowance in due course.

In the event Applicants have overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, Applicants hereby conditionally petition therefor and authorizes that any charges be made to Deposit Account No. 20-0095,

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Should any question concerning any of the foregoing arise, the Examiner is invited to telephone the undersigned at (317) 894-0801.

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